IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Daniel Tan

Serial No. Not yet assigned

Filed August 19, 2003

For: SELF OPENING BAG STACK

AND METHOD OF MAKING

SAME

PATENTS



PETITION TO MAKE SPECIAL

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.102, Applicant hereby petitions to accelerate the examination of the above application. A credit card form in the amount of \$130 is enclosed as the fee required by 37 CFR 1.17(h) §1.102. The above application presents claims directed to a single invention. Applicant hereby submits that he will make an election without traverse as a prerequisite to the grant of special status should the Office determine that all the claims presented are not obviously directed to a single invention. A pre-examination search was performed by Rosenberg, Klein & Lee, Patent Research Specialists, in the following Fields of Search: 383/8,9 and 206/554. Further references were developed by the undersigned.

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Copies of the following seven references deemed most closely related to the subject matter encompassed by the claims are enclosed:

Prince et al.	4,811,417	March 7, 1989
Baxley et al.	4,676,378	June 30, 1987
Nguyen	5,363,965	November 15, 1994
Bose et al.	5,207,328	May 4, 1993
Li	5,469,970	November 28, 1995
Huang et al.	5,865,313	February 2, 1999
Chew	6,079,877	June 27, 2000

The following is a discussion of the above listed references which points out, with the particularity required by 37 CFR 1.111 how the claimed subject matter is distinguishable over the references.

Prince et al. 4,811,417 March 7, 1989

This patent is directed to a handled bag with supporting slits in the handle. Referring to the Figures, the bag-pack 10 is mounted on a support rack 12 that has a base 14 and a pair of supporting arms 16, as well as mounting fingers 18 for holding tab portion 30. The plurality of bags comprising bag-pack 10 are joined together near the top of handles 28 by means of welds 34. The welds 34 are formed using pin 42 with the details of the method for forming the welds described in column 4, beginning at line 47.

The instant invention includes additional features not found in this reference. These features include the following: 1) a special formulation for the polyethylene and other ingredients used to fabricate the bags of the bag stack; and 2) at least an upper portion of an outer surface of

the front and rear walls of each of the bags are corona treated. Thus the present invention may be distinguished from the *Prince et al.* '417 patent.

The claimed subject matter relating to these distinguishing features is described in Claim 1 with the relevant clauses underlined:

1. A self-opening bag stack comprising:

a plurality of stacked polyethylene film bags comprising about 40-48 wt. % high density,

high molecular weight polyethylene, 12-20 wt. % high density, medium molecular

weight polyethylene, 20-30 wt. % linear low density polyethylene, 0-8 wt. % color

concentrate, releasably adhered together in substantial registration;

each of said bags including front and rear polyethylene film walls, each of said front and rear walls having first and second side edges, a top edge and a bottom edge; said front and rear walls being integrally joined at their first and second side edges and secured together at their bottom edges and defining an open mouth portion

at least an upper portion of an outer surface of said front and rear walls of each of said bags having been corona treated.

The features described by these clauses are not found in the *Prince et al.* '417 patent. Applicant has also examined the claims of this reference with regards to infringement and determined the following. Independent Claims 1 and 3 describe "...each handle being provided with an upright, substantially straight slit extending along the handle to permit mounting of each bag handle on a protruding arm of a supporting rack.." The instant invention lacks the described upright, substantially straight slit. As the present invention lacks this limitation, it will not infringe independent Claims 1 or 3, or Claim 2, which depends from Claim 1.

adjacent said top edges; and

Baxley et al.

4,676,378

June 30, 1987

This patent is directed to a bag pack comprising a stack of thermoplastic shopping bags that are bound together and mounted on a rack in such a manner that as one is removed from the rack, the next is opened and remains on the rack to receive material therein. The rack 24 that is used in this invention for the bag pack comprises a flat base 26 with a pair of laterally spaced support arms 28 to accommodate fully expanded bags with handles 16 engaged with the support arms 28. Transverse member 29 extending between support arms 28 supports a tab receiving hook element 30 for engagement through the tab apertures 31. When the bag pack is produced, and either prior to or simultaneously with the forming of the cut line 38 through the stacked bag handles, the flaps 36 are bonding together throughout the full stack. This is done by use of a heated pin or rod extended centrally through the flaps 36 to directly heat seal the flaps together.

The instant invention includes several features not found in *Baxley et al.*. As such, it should be patentable over this reference. These features include the following: 1) a special formulation for the polyethylene and other ingredients used to fabricate the bags of the bag stack; and 2) at least an upper portion of an outer surface of the front and rear walls of each of the bags are corona treated. These features, described by the clauses of Claim 1, *supra*, are not found in the *Baxley et al.* '378 patent.

Further, the independent claims of this reference require that "...aligned mounting apertures through the handles of each handle stack for simultaneous reception of each handle stack on a corresponding support rod receivable through the aligned apertures, bag retaining means on said bags fixing said handles together in each said handle stack for maintaining the apertures in alignment, said bag retaining means comprising a flap within each aperture integral with the corresponding bag at a minor area on the periphery of the aperture, said minor area

comprising a severance area and defining said severable means, the <u>flaps of the apertures in each handle stack being fixedly secured to the adjacent flaps for retention of the flaps in overlying aligned relation</u> and said apertures in alignment..." The instant invention does not require that flaps of the apertures in each handle stack be so secured to adjacent flaps to maintain alignment of the bags. Thus, as the instant invention lacks at least this relevant limitation, it will not infringe this reference.

Nguyen 5,363,965 November 15, 1994

This patent is directed to a self-opening thermoplastic bag system. As seen in FIG. 2, the bags are supported on two horizontal arms that engage holes in the bag handles. The individual bags of the invention are held together in a bag pack P via a heated or cold punch 29 formed near the tab 41. The punches seen in this invention permeate the walls of the bags such that the rear wall of the next bag remains with the pack and is supported by the tab holding the opened bag in place on the rack as the lead bag is removed from the rack.

The present invention includes several features not found in *Nguyen*, as such, it should be patentable over this reference. These features include the following: 1) a special formulation for the polyethylene and other ingredients used to fabricate the bags of the bag stack; and 2) at least an upper portion of an outer surface of the front and rear walls of each of the bags are corona treated. Thus the present invention may be distinguished from the *Nguyen* '965 patent. The claimed subject matter discussed above is described in Claim 1, illustrated *supra*.

In addition, this the independent claims of this patent includes "...first and second punch stamps formed in each of said first and second handles..." As the present invention lacks these punch stamps, it will not infringe this reference.

Bose et al.

5,207,328

May 4, 1993

This patent is directed to a thermoplastic bag and bag pack. The bag is made of a thermoplastic material such as high molecular weight, high-density polyethylene. Each of the handles of the bags comprises multiple layers of material which results from the configuration utilizing folded pleats 14. Thus, there are four layers of material for each of the handles. Each of the handles has an aperture extending through the layers of material in the form of an irregular shaped slit 15. When the slits are cut, the resulting slits 15 with the materials 16 and 17 are connected at the connection zones 18. This flexible connection permits loose interengagement of the layers of the inner slit material with some of the other layers of both the inner and outer slit materials. Thus, the need for cold staking or hot welding is eliminated and the alignment of the bags depends solely on the interengagement of the slit materials.

As discussed above, the present invention includes several features not found in this reference, namely, the special formulation for the polyethylene and other ingredients used to fabricate the bags of the bag stack and at least an upper portion of an outer surface of the front and rear walls of each of the bags being corona treated. As such, the present invention may be distinguished from the *Bose et al.* '328 patent. The claimed subject matter discussed above is described in Claim 1, illustrated *supra*.

Independent Claims 1 and 4 of this reference each include mention of "...two-part inner slit material is comprised of separate layers of material, the inner slit material of each layer being integrally and flexibly connected to the outer slit material of the same layer at two separate locations for loose interengagement with at least some of the other layers of said inner and outer slit materials....", which is a limitation not found in the instant invention. Independent Claims 10 and 13 each describe "...each of said slits having opposite ends spaced from one of said outer

edges to leave bridging regions therebetween." This is another limitation missing from the present invention. As the present invention lacks these limitations, it will not infringe this reference.

This patent is directed to easy open stackable handle bags. The system comprises a bag pack 10 for use with bag rack 12 that is made up of a plurality of aligned individual handle bags 14. The bags 14 each have an area of adhesive 16 between each bag 14 which allows for the front wall 24 of the successive bag 14 to be pulled from one side 31 as the previous bag 14 is pulled from the bag rack 12.

The present invention includes several features not found in this reference, namely, the special formulation for the polyethylene and other ingredients used to fabricate the bags of the bag stack and at least an upper portion of an outer surface of the front and rear walls of each of the bags being corona treated. The claimed subject matter discussed above is described in Claim 1, illustrated *supra*.

With regard to infringement, independent Claims 1, 13 and 5 each contain the element "...an area of releasable adhesive positioned at an offset area located (i) between the rear wall of each handle bag and the front wall of each subsequent handle bag in the bag pack..." This is a limitation not found in the present invention and thus it does not infringe this reference.

This patent is directed to a plastic bag pack system with novel handle features. Referring to the Figures, the central pad portions 28 are preferably heat welded together at 30, thus forming a stack of aligned central tab portions. The individual bags 10 of the bag pack are treated on the outside surface by corona surface treatment that prepares the surfaces for receiving printing inks.

When adjacent layers of corona surface treated plastic material are cut with a blade, they tend to frangibly bond together. This bonding gives rise to the self-opening feature. Both low density and polyethylene and high-density polyethylene may be used as the plastic material to form the bags described in this invention.

As the instant invention includes several features not found in *Huang et al.*, it should be patentable over this reference. These features include the following: 1) a special formulation for the polyethylene and other ingredients used to fabricate the bags of the bag stack; and 2) at least an upper portion of an outer surface of the front and rear walls of each of the bags are corona treated. Thus, the present invention may be distinguished from this reference. The claimed subject matter discussed above is described in Claim 1, illustrated *supra*.

Independent Claims 1 and 18 of this reference describe "...each of said handles having a "J"-shaped handle aperture formed therethrough and adapted for use in mounting the bag pack on a bagging rack by passage of suspension arms of the bagging rack through the "J"-shaped handle apertures,..." This element is not found in the instant invention. As this limitation is missing in the present invention, it will not infringe the *Huang et al.* '313 patent.

Chew 6,079,877 June 27, 2000

This patent is directed to a plastic bag with triangular cut tabs. The outer walls of adjacent bags have been corona-treated and this treatment along with appropriately disposed pressure points enable the bags of the pack to be self-opening.

The present invention includes several features not found in this reference, namely, the special formulation for the polyethylene and other ingredients used to fabricate the bags of the bag stack and at least an upper portion of an outer surface of the front and rear walls of each of the

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bags being corona treated. The claimed subject matter discussed above is described in Claim 1,

illustrated supra.

Further, independent Claim 1 of Chew includes "...each of said tabs having within its

area a centrally disposed pair of upwardly extending angular cuts, said cuts being brought

together at their upper ends to define an upwardly directed angular flap which, when pulled

down, forms a triangular opening, the apex of which opening is directed toward, but spaced from

the bag mouth, the lowermost end of each cut terminating in an inwardly and upwardly turned

curve spaced from the inwardly and upwardly oppositely turned curve of the other cut,..." As

this limitation is missing from the present invention, it will not infringe this reference.

Claim 1 of the present invention, illustrated supra, describes the invention in its most

basic form. Other novel and useful additional feature are described in Claims 2-42 of the instant

application. These claims relate to additional compounds that are added to the basic formulation,

means for forming the bags from recycled material and the uses of the formulation for various

types of bags.

Based on the above analysis of the pre-examination search and discussion of the features

of the instant invention, Applicant requests that the examination of the above application be

accelerated.

Respectfully submitted,

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